STIC Search Report
Biotech-Chem Library

STIC Database Tracking Number: 101175

TO:	From:
Shailendra Kumar **Location: 7a07 / 7e12** **Sunday, August 17, 2003** **Art Unit: 1621** **Phone: 308-4519** **Serial Number: 10 / 182916**	**Jan Delaval** **Location: Biotech-Chem Library** **CM1-1E07** **Phone: 308-4498** **jan.delaval@uspto.gov**

Search Notes

Jan Delaval
Reference Librarian
Biotechnology & Chemical Library
CM1 1E07 – 703-308-4498
jan.delaval@uspto.gov

USPTO

STIC SEARCH RESULTS

Biotech-Chem Library

Questions about the scope or the results of the search? Contact ***the searcher or contact:***

Mary Hale, Information Branch Supervisor
308-4258, CM1-1E01

Voluntary Results Feedback Form

- *I am an examiner in Workgroup:* ☐ *Example: 1610*
- *Relevant prior art **found**, search results used as follows:*
  - ☐ 102 rejection
  - ☐ 103 rejection
  - ☐ Cited as being of interest.
  - ☐ Helped examiner better understand the invention.
  - ☐ Helped examiner better understand the state of the art in their technology.

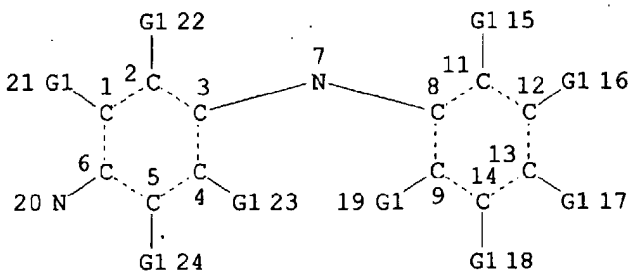
  Types of relevant prior art found:
  - ☐ Foreign Patent(s)
  - ☐ Non-Patent Literature
    (journal articles, conference proceedings, new product announcements etc.)
- *Relevant prior art **not found:***
  - ☐ Results verified the lack of relevant prior art (helped determine patentability).
  - ☐ Results were not useful in determining patentability or understanding the invention.

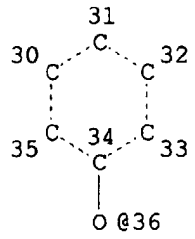
Comments:

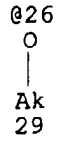
Drop off or send completed forms to STIC/Biotech-Chem Library CM1 – Circ. Desk

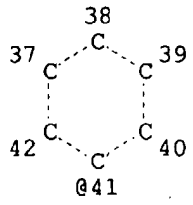
sira
Search and Information Resources Administration

```
=> fil reg
FILE 'REGISTRY' ENTERED AT 16:11:44 ON 17 AUG 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:   15 AUG 2003  HIGHEST RN 567484-39-3
DICTIONARY FILE UPDATES:  15 AUG 2003  HIGHEST RN 567484-39-3

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available.  See HELP
PROPERTIES for more information.  See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> d sta que l8
L1                STR
```



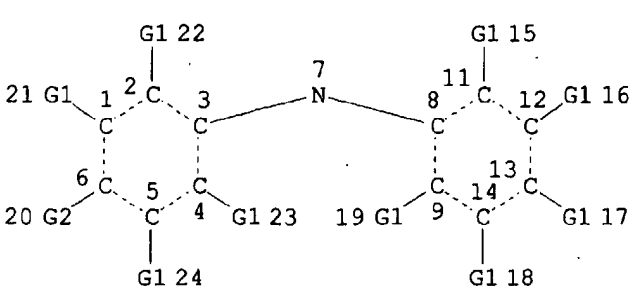


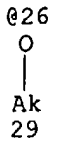


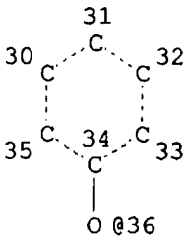


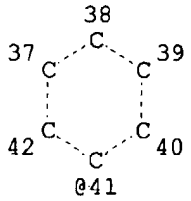

```
VAR G1=H/OH/AK/26/X/41/36
NODE ATTRIBUTES:
CONNECT IS M1  RC AT  20
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC   8   3  30  37
NUMBER OF NODES IS  38

STEREO ATTRIBUTES: NONE
L3          5155 SEA FILE=REGISTRY CSS FUL L1
L4               STR
```

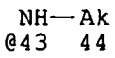
Jan Delaval
Reference Librarian
Biotechnology & Chemical Library
CM1 1E07 – 703-308-4498
jan.delaval@uspto.gov











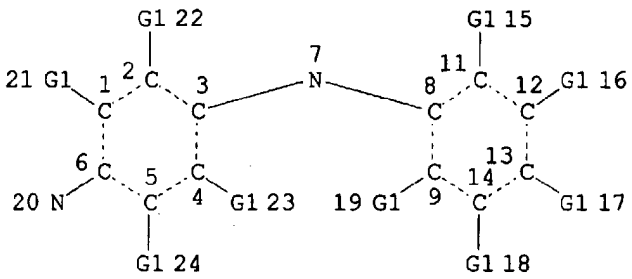
VAR G1=H/OH/AK/26/X/41/36
VAR G2=NH2/43
NODE ATTRIBUTES:
CONNECT IS E1 RC AT 44
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

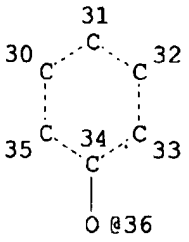
GRAPH ATTRIBUTES:
RSPEC 8 3 30 37
NUMBER OF NODES IS 40

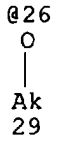
STEREO ATTRIBUTES: NONE
L6 SCR 2043 OR 2039 OR 2050 OR 2049 OR 2048 OR 2053 OR 2054
L8 239 SEA FILE=REGISTRY SUB=L3 SSS FUL L4 NOT L6

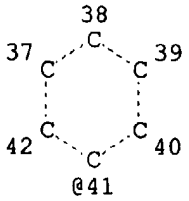
100.0% PROCESSED 3867 ITERATIONS 239 ANSWERS
SEARCH TIME: 00.00.01

=> d sta que l12
L1 STR





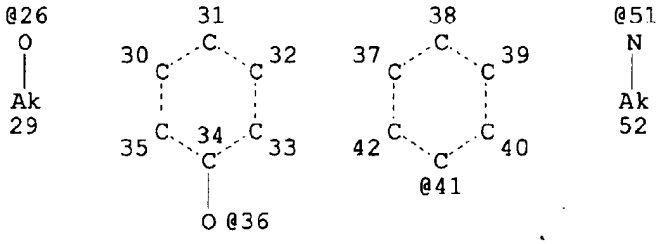


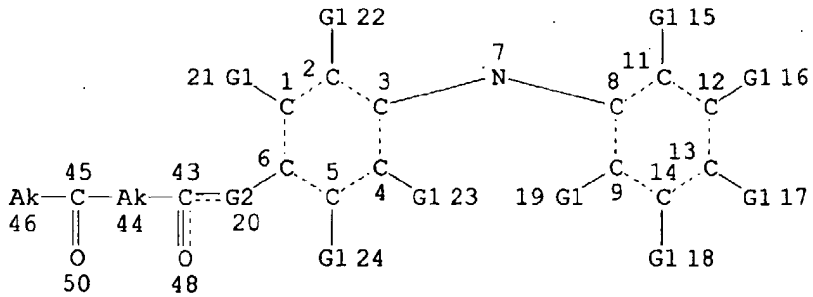


VAR G1=H/OH/AK/26/X/41/36
NODE ATTRIBUTES:
CONNECT IS M1 RC AT 20
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC 8 3 30 37
NUMBER OF NODES IS 38

STEREO ATTRIBUTES: NONE
L3 5155 SEA FILE=REGISTRY CSS FUL L1
L10 STR





VAR G1=H/OH/AK/26/X/41/36

VAR G2=NH/51
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

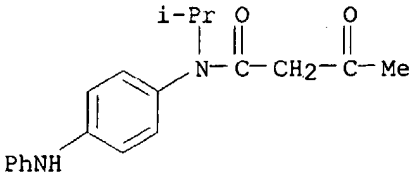
GRAPH ATTRIBUTES:
RSPEC 30 37 6 8
NUMBER OF NODES IS 46

STEREO ATTRIBUTES: NONE
L12 4 SEA FILE=REGISTRY SUB=L3 SSS FUL L10

100.0% PROCESSED 1269 ITERATIONS 4 ANSWERS
SEARCH TIME: 00.00.01

=> d ide can tot l12

L12 ANSWER 1 OF 4 REGISTRY COPYRIGHT 2003 ACS on STN
RN 347895-01-6 REGISTRY
CN Butanamide, N-(1-methylethyl)-3-oxo-N-[4-(phenylamino)phenyl]- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN N-Isopropyl-N-[4-(phenylamino)phenyl]-3-oxobutyramide
FS 3D CONCORD
MF C19 H22 N2 O2
SR CA
LC STN Files: CA, CAPLUS, CASREACT, USPATFULL



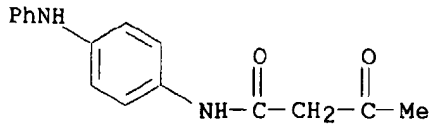
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1937 TO DATE)
2 REFERENCES IN FILE CAPLUS (1937 TO DATE)

REFERENCE 1: 135:152620

REFERENCE 2: 135:77736

L12 ANSWER 2 OF 4 REGISTRY COPYRIGHT 2003 ACS on STN
RN 38971-14-1 REGISTRY
CN Butanamide, 3-oxo-N-[4-(phenylamino)phenyl]- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 4-(Acetoacetamido)diphenylamine
CN 4-(Acetoacetylamino)diphenylamine
CN N-[4-(Phenylamino)phenyl]-3-oxobutyramide
FS 3D CONCORD
MF C16 H16 N2 O2
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, CHEMCATS, IFICDB, IFIPAT, IFIUDB, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4 REFERENCES IN FILE CA (1937 TO DATE)
4 REFERENCES IN FILE CAPLUS (1937 TO DATE)

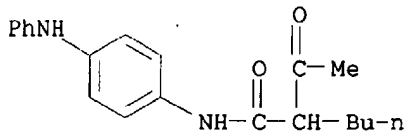
REFERENCE 1: 135:152620

REFERENCE 2: 135:77736

REFERENCE 3: 78:33932

REFERENCE 4: 77:130594

L12 ANSWER 3 OF 4 REGISTRY COPYRIGHT 2003 ACS on STN
RN 21684-06-0 REGISTRY
CN Hexananilide, 2-acetyl-4'-anilino- (8CI) (CA INDEX NAME)
FS 3D CONCORD
MF C20 H24 N2 O2
LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDB

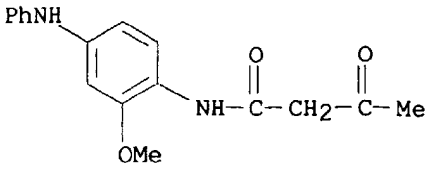


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1937 TO DATE)
1 REFERENCES IN FILE CAPLUS (1937 TO DATE)

REFERENCE 1: 70:68180

L12 ANSWER 4 OF 4 REGISTRY COPYRIGHT 2003 ACS on STN
RN 21684-02-6 REGISTRY
CN o-Acetoacetanisidide, 4'-anilino- (8CI) (CA INDEX NAME)
FS 3D CONCORD
MF C17 H18 N2 O3
LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDB

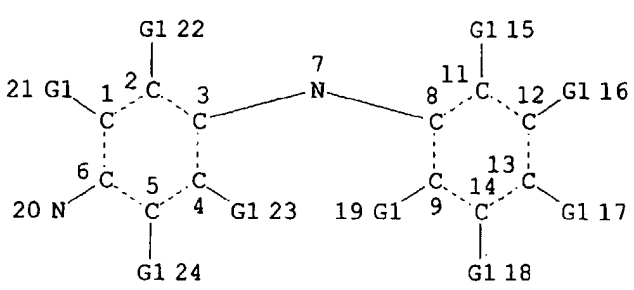


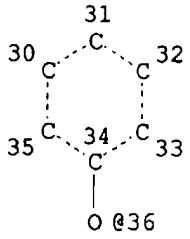
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

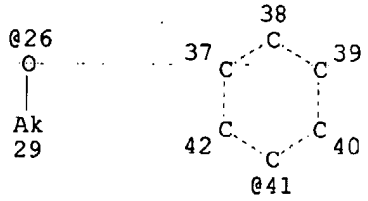
1 REFERENCES IN FILE CA (1937 TO DATE)
1 REFERENCES IN FILE CAPLUS (1937 TO DATE)

REFERENCE 1: 70:68180

=> d sta que l15
L1 STR



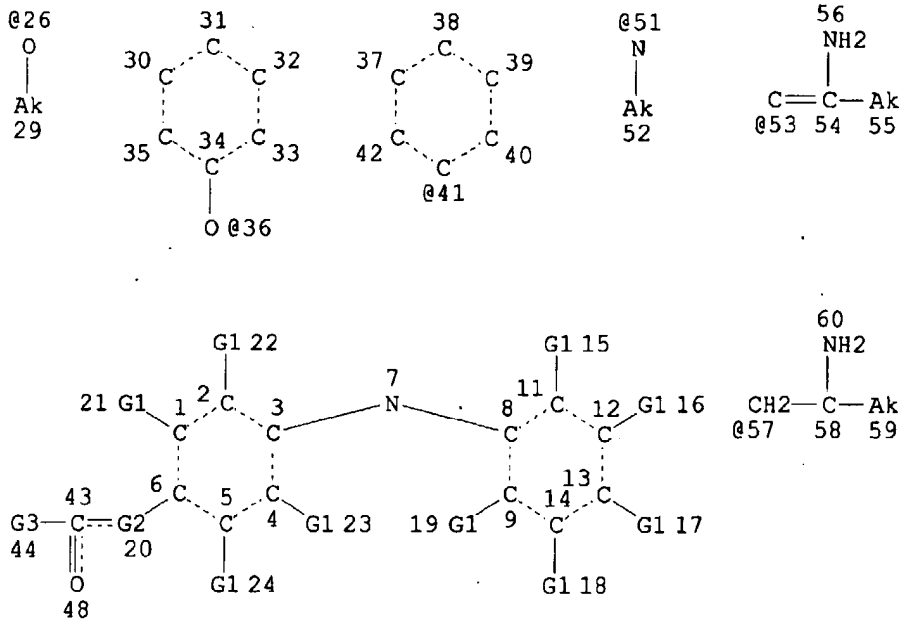




VAR G1=H/OH/AK/26/X/41/36
NODE ATTRIBUTES:
CONNECT IS M1 RC AT 20
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC 8 3 30 37
NUMBER OF NODES IS 38

STEREO ATTRIBUTES: NONE
L3 5155 SEA FILE=REGISTRY CSS FUL L1
L13 STR



VAR G1=H/OH/AK/26/X/41/36
VAR G2=NH/51
VAR G3=57/53
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC 30 37 6 8
NUMBER OF NODES IS 51

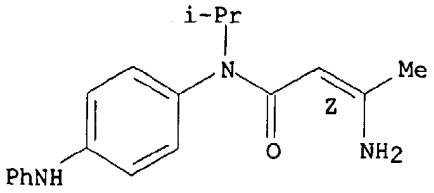
STEREO ATTRIBUTES: NONE
L15 3 SEA FILE=REGISTRY SUB=L3 SSS FUL L13

100.0% PROCESSED 34 ITERATIONS 3 ANSWERS
SEARCH TIME: 00.00.01

=> d ide can tot l15

L15 ANSWER 1 OF 3 REGISTRY COPYRIGHT 2003 ACS on STN
RN 353236-69-8 REGISTRY
CN 2-Butenamide, 3-amino-N-(1-methylethyl)-N-[4-(phenylamino)phenyl]-, (2Z)-(9CI) (CA INDEX NAME)
OTHER NAMES:
CN (Z)-N-Isopropyl-N-[4-(phenylamino)phenyl]-3-amino-2-butenamide
FS STEREOSEARCH
MF C19 H23 N3 O
SR CA
LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

Double bond geometry as shown.

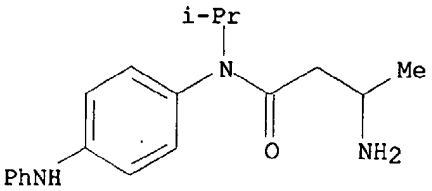


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1937 TO DATE)
1 REFERENCES IN FILE CAPLUS (1937 TO DATE)

REFERENCE 1: 135:152620

L15 ANSWER 2 OF 3 REGISTRY COPYRIGHT 2003 ACS on STN
RN 347895-03-8 REGISTRY
CN Butanamide, 3-amino-N-(1-methylethyl)-N-[4-(phenylamino)phenyl]- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN N-Isopropyl-N-[4-(phenylamino)phenyl]-3-aminobutyramide
FS 3D CONCORD
MF C19 H25 N3 O
SR CA
LC STN Files: CA, CAPLUS, CASREACT, USPATFULL



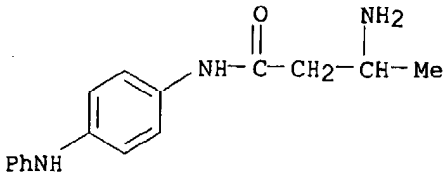
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1937 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
2 REFERENCES IN FILE CAPLUS (1937 TO DATE)

REFERENCE 1: 135:152620

REFERENCE 2: 135:77736

L15 ANSWER 3 OF 3 REGISTRY COPYRIGHT 2003 ACS on STN
RN 347895-00-5 REGISTRY
CN Butanamide, 3-amino-N-[4-(phenylamino)phenyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C16 H19 N3 O
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



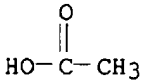
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1937 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1 REFERENCES IN FILE CAPLUS (1937 TO DATE)

REFERENCE 1: 135:77736

=> d ide can 19

L9 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN
RN 64-19-7 REGISTRY
CN **Acetic acid (7CI, 8CI, 9CI)** (CA INDEX NAME)
OTHER NAMES:
CN **acetic acid**
CN Aci-Jel
CN E 260
CN Ethanoic acid
CN Ethanoic acid monomer
CN Ethylic acid
CN Glacial acetic acid
CN Methanecarboxylic acid
CN NSC 111201
CN NSC 112209
CN NSC 115870
CN NSC 127175
CN NSC 132953
CN NSC 406306
CN Vinegar acid
FS 3D CONCORD
DR 77671-22-8
MF C2 H4 O2
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, TULSA, ULIDAT, USAN, USPAT2, USPATFULL, VETU, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

78731 REFERENCES IN FILE CA (1937 TO DATE)
3691 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
78794 REFERENCES IN FILE CAPLUS (1937 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 139:126787

REFERENCE 2: 139:125121

REFERENCE 3: 139:125041

REFERENCE 4: 139:124084

REFERENCE 5: 139:124020

REFERENCE 6: 139:123934

REFERENCE 7: 139:123226

REFERENCE 8: 139:122865

REFERENCE 9: 139:122814

REFERENCE 10: 139:122811

=> d ide can l16

L16 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN
RN 7664-41-7 REGISTRY
CN **Ammonia (8CI, 9CI)** (CA INDEX NAME)
OTHER NAMES:
CN Ammonia gas
CN Ammonia, kiliamer
CN Ammonia-14N
CN Nitro-Sil
CN R 717
CN Refrigerent R717
CN Spirit of Hartshorn
FS 3D CONCORD
DR 8007-57-6, 208990-07-2, 214478-05-4, 558443-52-0
MF H3 N
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PDLCOM*, PHARMASEARCH, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, TULSA, ULIDAT, USAN, USPAT2, USPATFULL, VETU, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

NH_3

117785 REFERENCES IN FILE CA (1937 TO DATE)

1623 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
117872 REFERENCES IN FILE CAPLUS (1937 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 139:126978

REFERENCE 2: 139:126533

REFERENCE 3: 139:126189

REFERENCE 4: 139:126136

REFERENCE 5: 139:126106

REFERENCE 6: 139:126085

REFERENCE 7: 139:125935

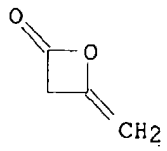
REFERENCE 8: 139:125919

REFERENCE 9: 139:125858

REFERENCE 10: 139:125752

=> d ide can 126

L26 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN
RN **674-82-8** REGISTRY
CN 2-Oxetanone, 4-methylene- (8CI, 9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 3-Butenoic acid, 3-hydroxy-, .beta.-lactone (6CI, 7CI)
OTHER NAMES:
CN 4-Methylene-2-oxetanone
CN Diketene
CN Ethenone, dimer
CN Ketene dimer
CN NSC 93783
AR 6842-10-0
FS 3D CONCORD
DR 2130-41-8
MF C4 H4 O2
CI COM
LC STN Files: AGRICOLA, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DETHERM*, DIPPR*, EMBASE, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS, PIRA, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2564 REFERENCES IN FILE CA (1937 TO DATE)
551 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
2565 REFERENCES IN FILE CAPLUS (1937 TO DATE)
62 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 139:118330

REFERENCE 2: 139:117261

REFERENCE 3: 139:102592

REFERENCE 4: 139:54322

REFERENCE 5: 139:54284

REFERENCE 6: 139:38119

REFERENCE 7: 139:8327

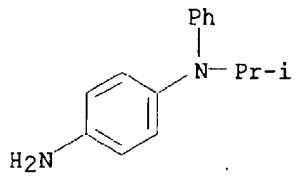
REFERENCE 8: 138:403245

REFERENCE 9: 138:403240

REFERENCE 10: 138:401721

=> d ide can 127

L27 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN
RN **3085-82-3** REGISTRY
CN 1,4-Benzenediamine, N-(1-methylethyl)-N-phenyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN p-Phenylenediamine, N-isopropyl-N-phenyl- (7CI, 8CI)
OTHER NAMES:
CN N-Isopropyl-N-phenyl-p-phenylenediamine
CN N-Phenyl-N-isopropyl-p-phenylenediamine
FS 3D CONCORD
MF C15 H18 N2
LC STN Files: BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMLIST, PROMT, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

53 REFERENCES IN FILE CA (1937 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
54 REFERENCES IN FILE CAPLUS (1937 TO DATE)
3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 139:121650

REFERENCE 2: 139:22212

REFERENCE 3: 138:74048

REFERENCE 4: 137:144483

REFERENCE 5: 136:248862

REFERENCE 6: 135:226632

REFERENCE 7: 135:152620

REFERENCE 8: 135:93735

REFERENCE 9: 134:349097

REFERENCE 10: 133:151062

=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 16:17:02 ON 17 AUG 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 17 Aug 2003 VOL 139 ISS 8
FILE LAST UPDATED: 15 Aug 2003 (20030815/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d all hitstr tot 130

L30 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:581831 HCAPLUS
DN 135:152620
TI Method for producing acetoacetylated aromatic amines
IN Glufke, Uta; Hanselmann, Paul
PA Lonza A.-G., Switz.
SO PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DT Patent
LA German
IC ICM C07C231-04
ICS C07C237-16; C07C237-10; C07C231-12
CC 25-4 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
Section cross-reference(s): 23
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE

PI	WO 2001056973	A1	20010809	WO 2001-EP1163	20010202
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, US, US				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1252134	A1	20021030	EP 2001-913783	20010202
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	US 2003125392	A1	20030703	US 2002-182916	20021021
PRAI	EP 2000-102418	A	20000204		
	US 2000-203922P	P	20000512		
	WO 2001-EP1163	W	20010202		
OS	CASREACT 135:152620; MARPAT 135:152620				
GI					

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to a method for producing acetoacetylated arom. amines I [R1 and R2, each time they occur and independently of each other, mean hydroxy, C1-6-alkyl, C1-6-alkoxy, halogen, Ph or phenoxy; R3 means hydrogen or C1-6-alkyl; m is a whole no. from 0 to 4; and n is a whole no. from 0 to 5]. According to said method, **diketene** is reacted with a N-phenyl-p-phenylenediamine derivs. II [R1, R2, R3, m and n have the meanings given above], in the presence of 3-40% **acetic acid** and at temps. of 20 to 100 .degree.C, preferably 60 to 70 .degree.C. The invention also relates to the compds. I [R3 = C1-6-alky] and the enamines III that can be obtained from these by reaction with **ammonia**, and their **hydrogenation** products IV.

ST arom amine acetoacetylation; **diketene** condensation phenylenediamine deriv; enamine acetoacetamide prepn **hydrogenation** ; aminobutyramide prepn

IT Acetylation
(acetoacetylation; prepn. of acetoacetylated arom. amines via condensation of **diketene** with N-phenyl-p-phenylenediamine derivs.)

IT Amines, preparation
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(arom.; prepn. of acetoacetylated arom. amines via condensation of **diketene** with N-phenyl-p-phenylenediamine derivs.)

IT **Hydrogenation**
(prepn. of acetoacetylated arom. amines via condensation of **diketene** with N-phenyl-p-phenylenediamine derivs.)

IT Enamines
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of acetoacetylated arom. amines via condensation of **diketene** with N-phenyl-p-phenylenediamine derivs.)

IT **347895-01-6P 353236-69-8P**
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of acetoacetylated arom. amines via condensation of **diketene** with N-phenyl-p-phenylenediamine derivs.)

IT **38971-14-1P 347895-03-8P**

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of acetoacetylated arom. amines via condensation of **diketene** with N-phenyl-p-phenylenediamine derivs.)

IT **64-19-7, Acetic acid**, uses
RL: NUU (Other use, unclassified); USES (Uses)
(prepn. of acetoacetylated arom. amines via condensation of **diketene** with N-phenyl-p-phenylenediamine derivs.)

IT **101-54-2**, N-Phenyl-p-phenylenediamine **101-54-2D**, N-Phenyl-p-phenylenediamine, derivs. **674-82-8, Diketene 3085-82-3**, N-Isopropyl-N-phenyl-p-phenylenediamine **7664-41-7, Ammonia**, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of acetoacetylated arom. amines via condensation of **diketene** with N-phenyl-p-phenylenediamine derivs.)

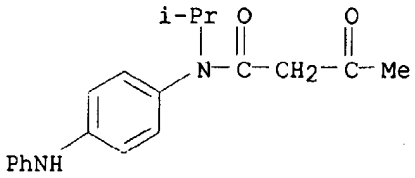
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Cherpeck, R; US 5466268 A 1995 HCAPLUS
(2) Chevron Chem Co; EP 0719762 A 1996 HCAPLUS
(3) Deutsche Gold- Und Silber-Scheideanstalt Vorm Roessler; ZA 67068521 1968 HCAPLUS
(4) Thiele, K; US 3702365 A 1972 HCAPLUS

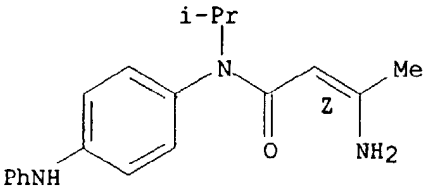
IT **347895-01-6P 353236-69-8P**
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of acetoacetylated arom. amines via condensation of **diketene** with N-phenyl-p-phenylenediamine derivs.)

RN 347895-01-6 HCAPLUS
CN Butanamide, N-(1-methylethyl)-3-oxo-N-[4-(phenylamino)phenyl]- (9CI) (CA INDEX NAME)



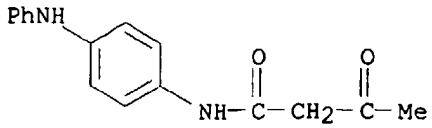
RN 353236-69-8 HCAPLUS
CN 2-Butenamide, 3-amino-N-(1-methylethyl)-N-[4-(phenylamino)phenyl]-, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

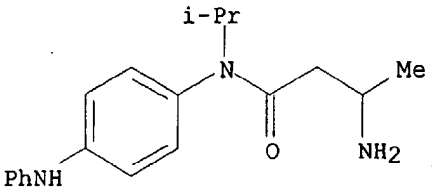


IT **38971-14-1P 347895-03-8P**
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of acetoacetylated arom. amines via condensation of **diketene** with N-phenyl-p-phenylenediamine derivs.)

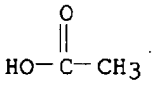
RN 38971-14-1 HCAPLUS
CN Butanamide, 3-oxo-N-[4-(phenylamino)phenyl]- (9CI) (CA INDEX NAME)



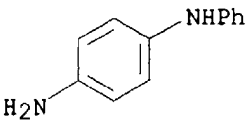
RN 347895-03-8 HCAPLUS
CN Butanamide, 3-amino-N-(1-methylethyl)-N-[4-(phenylamino)phenyl]- (9CI) (CA INDEX NAME)



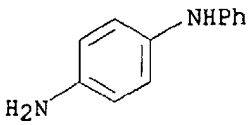
IT **64-19-7, Acetic acid**, uses
RL: NUU (Other use, unclassified); USES (Uses)
(prepn. of acetoacetylated arom. amines via condensation of **diketene** with N-phenyl-p-phenylenediamine derivs.)
RN 64-19-7 HCAPLUS
CN Acetic acid (7CI, 8CI, 9CI) (CA INDEX NAME)



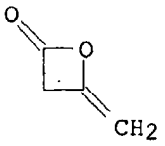
IT **101-54-2**, N-Phenyl-p-phenylenediamine **101-54-2D**, N-Phenyl-p-phenylenediamine, derivs. **674-82-8, Diketene** **3085-82-3**, N-Isopropyl-N-phenyl-p-phenylenediamine **7664-41-7, Ammonia**, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of acetoacetylated arom. amines via condensation of **diketene** with N-phenyl-p-phenylenediamine derivs.)
RN 101-54-2 HCAPLUS
CN 1,4-Benzenediamine, N-phenyl- (9CI) (CA INDEX NAME)



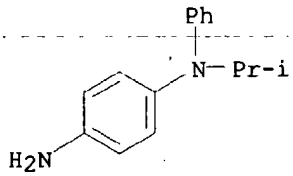
RN 101-54-2 HCAPLUS
CN 1,4-Benzenediamine, N-phenyl- (9CI) (CA INDEX NAME)



RN 674-82-8 HCAPLUS
CN 2-Oxetanone, 4-methylene- (8CI, 9CI) (CA INDEX NAME)



RN 3085-82-3 HCAPLUS
CN 1,4-Benzenediamine, N-(1-methylethyl)-N-phenyl- (9CI) (CA INDEX NAME)

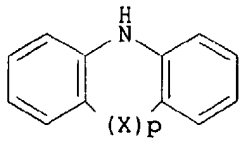


RN 7664-41-7 HCAPLUS
CN Ammonia (8CI, 9CI) (CA INDEX NAME)

L30 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:507771 HCAPLUS
DN 135:77736
TI Compositions comprising antioxidant amines based on N-(4-anilinophenyl)amides for stabilizing lube oil additive formulations
IN Nalesnik, Theodore E.; Duyck, Karl J.
PA Uniroyal Chemical Company, Inc., USA
SO PCT Int. Appl., 54 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C08F255-04
ICS C08F008-32; C10M149-04; C08K005-20
CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 51
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001049761	A1	20010712	WO 2000-US32951	20001205
W: CA, CN, IN, JP, KR, MX, RU, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
EP 1252209	A1	20021030	EP 2000-983908	20001205

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
JP 2003519262 T2 20030617 JP 2001-550301 20001205
US 2003030033 A1 20030213 US 2002-168405 20020619
PRAI US 1999-173715P P 19991230
WO 2000-US32951 W 20001205
OS MARPAT 135:77736
GI



I

AB An N-arom. substituted acid amide compd. selected from R1R2NC(R3)BmCON(R4)AnR5 (A and B = alkylene; R1 = H, alkyl, alkylether, or ester; R2 = H if R1 = H; R2 = alkyl primary amine if R1 = alkyl, alkylether, or ester; R3 and R4 = H and alkyl; R5 = sterically hindered phenolic group of I or PhNHPh, where X = CH2, S, NH, or O; and m, n, and p = 0 or 1) is prepd. These compns. may be used as such or they may be bound to a polymer backbone via a linking moiety. Thus, **NH3** treatment of N-(4-anilinophenyl)-3-oxobutanamide in the presence of Raney Ni, and 800 psi H at 70.degree. for 2 h to give MeC(NH2)CH2CONH-p-C6H4NHPh having m.p. 130-132.degree., which can be reacted with maleated EPR to give an additive for processing lubricating oils.

ST anilinophenyl amide amine antioxidant polymer lubricating oil

IT Antioxidants
Lubricating oil additives
(antioxidant amines based on N-(4-anilinophenyl)amides and polymer-bound antioxidant amines for lube oil additives)

IT Amides, preparation
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(aryl, N-cocoalkyl derivs.; antioxidant amines based on N-(4-anilinophenyl)amides and polymer-bound antioxidant amines for lube oil additives)

IT Ethylene-propylene rubber
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(maleated, reaction products with anilinophenyl amide amine; antioxidant amines based on N-(4-anilinophenyl)amides and polymer-bound antioxidant amines for lube oil additives)

IT **347895-00-5DP**, reaction products with maleated EPR
347895-03-8DP, reaction products with maleated EPR
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(antioxidant amines based on N-(4-anilinophenyl)amides and polymer-bound antioxidant amines for lube oil additives)

IT **347895-00-5P 347895-03-8P**
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(antioxidant amines based on N-(4-anilinophenyl)amides and polymer-bound antioxidant amines for lube oil additives)

IT 151-18-8D, 3-Aminopropanenitrile, N-cocoalkyl deriv. **38971-14-1**
347895-01-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(antioxidant amines based on N-(4-anilinophenyl)amides and polymer-bound antioxidant amines for lube oil additives)

IT 9010-79-1P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(ethylene-propylene rubber, maleated, reaction products with anilinophenyl amide amine; antioxidant amines based on N-(4-anilinophenyl)amides and polymer-bound antioxidant amines for lube oil additives)

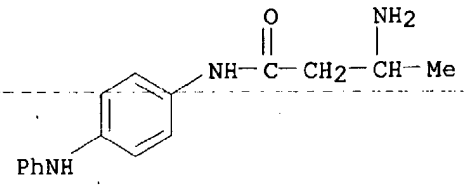
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

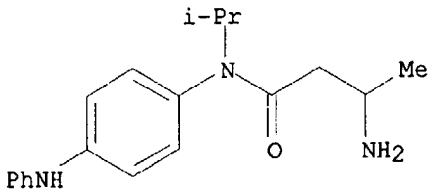
(1) Exxon Chemical Patents Inc; WO 9518199 A 1995 HCAPLUS
(2) Kapuscinski, M; US 5094766 A 1992 HCAPLUS
(3) Texaco Development Corp; EP 0491456 A 1992 HCAPLUS

IT **347895-00-5DP**, reaction products with maleated EPR
347895-03-8DP, reaction products with maleated EPR
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(antioxidant amines based on N-(4-anilinophenyl)amides and polymer-bound antioxidant amines for lube oil additives)

RN 347895-00-5 HCAPLUS
CN Butanamide, 3-amino-N-[4-(phenylamino)phenyl]- (9CI) (CA INDEX NAME)

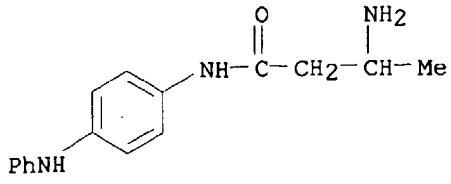


RN 347895-03-8 HCAPLUS
CN Butanamide, 3-amino-N-(1-methylethyl)-N-[4-(phenylamino)phenyl]- (9CI) (CA INDEX NAME)



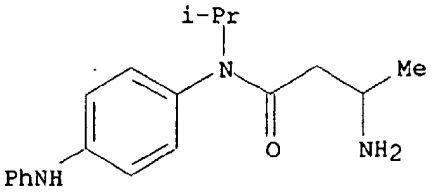
IT **347895-00-5P 347895-03-8P**
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(antioxidant amines based on N-(4-anilinophenyl)amides and polymer-bound antioxidant amines for lube oil additives)

RN 347895-00-5 HCAPLUS
CN Butanamide, 3-amino-N-[4-(phenylamino)phenyl]- (9CI) (CA INDEX NAME)

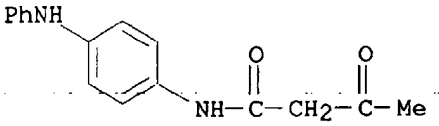


RN 347895-03-8 HCAPLUS

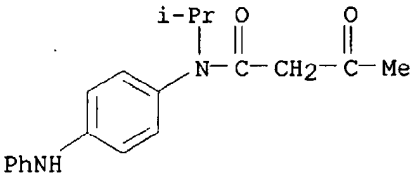
CN Butanamide, 3-amino-N-(1-methylethyl)-N-[4-(phenylamino)phenyl]- (9CI) (CA INDEX NAME)



IT **38971-14-1 347895-01-6**
RL: RCT (Reactant); RACT (Reactant or reagent)
(antioxidant amines based on N-(4-anilinophenyl)amides and polymer-bound antioxidant amines for lube oil additives)
RN 38971-14-1 HCAPLUS
CN Butanamide, 3-oxo-N-[4-(phenylamino)phenyl]- (9CI) (CA INDEX NAME)



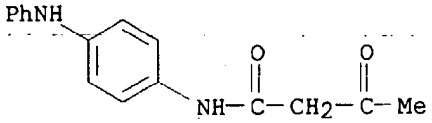
RN 347895-01-6 HCAPLUS
CN Butanamide, N-(1-methylethyl)-3-oxo-N-[4-(phenylamino)phenyl]- (9CI) (CA INDEX NAME)



L30 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1973:33932 HCAPLUS
DN 78:33932
TI 4-(Acetoacetylamino)diphenylamine in compositions for treating pain, fever, and inflammation
IN Thiele, Kurt
PA Deutsche Gold- und Silber-Scheideanstalt vorm. Roessler
SO U.S., 3 pp.
CODEN: USXXAM
DT Patent
LA English
IC A61K
NCL 424324000
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 25
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3702365	A	19721107	US 1971-154202	19710617
PRAI	US 1971-154202		19710617		

GI For diagram(s), see printed CA Issue.
AB Low toxicity (LD50 in rats over 1000 and in mice over 3000 mg/kg body wt.) pharmaceutical compns. contg. 10-500 mg 4-(acetoacetylamino)diphenylamine (I) are administered by mouth, injection, or local application. E.g., 10 g I was dissolved in 1 l. polyethylene glycol 400 with heating, the soln. dild. with water to 2 l. for injection and passed through a filter and filled into 2 ml glass ampuls.
ST acetoacetamido diphenylamine antipyretic; analgesic acetoacetamido diphenylamine
IT Analgesics
Antipyretics
Inflammation inhibitors
((acetoacetylamino)diphenylamine)
IT **38971-14-1**
RL: BIOL (Biological study)
(pharmaceutical)
IT **38971-14-1**
RL: BIOL (Biological study)
(pharmaceutical)
RN 38971-14-1 HCAPLUS
CN Butanamide, 3-oxo-N-[4-(phenylamino)phenyl]- (9CI) (CA INDEX NAME)

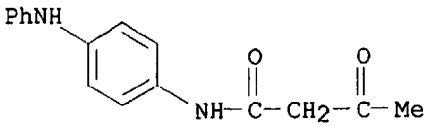


L30 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1972:530594 HCAPLUS
DN 77:130594
TI Antiinflammatory, analgesic, and antipyretic 4-(acetoacetamido)diphenylamine
IN Thiele, Kurt
PA Deutsche Gold- und Silber-Scheideanstalt vorm. Roessler
SO S. African, 12 pp.
CODEN: SFXXAB
DT Patent
LA English
CC 63-6 (Pharmaceuticals)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI ZA 7103728		19720104	ZA 1971-3728	19710609

GI For diagram(s), see printed CA Issue.
AB Compns. contg. 4-(acetoacetylamino) diphenylamine (I) or its salts together with a carrier have strong antiinflammatory, analgesic and antipyretic effects with very low toxicity. The prepns. may be administered in a variety of forms, including tablets, capsules, suppositories or injection solns.
ST antiinflammatory diphenylamine acetamido; analgesic diphenylamine acetamido; antipyretic diphenylamine acetamido
IT Analgesics
Antipyretics
Inflammation inhibitors
((acetoacetamido)diphenylamine)
IT **38971-14-1**
RL: BIOL (Biological study)
(pharmaceutical)
IT **38971-14-1**

RL: BIOL (Biological study)
(pharmaceutical)
RN 38971-14-1 HCAPLUS
CN Butanamide, 3-oxo-N-[4-(phenylamino)phenyl]- (9CI) (CA INDEX NAME)

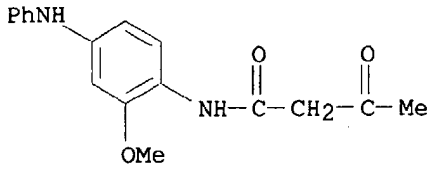


L30 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1969:68180 HCAPLUS
DN 70:68180
TI N-Aromatic substituted acid amides as analgesics
IN Thiele, Kurt
PA Deutsche Gold- und Silber-Scheideanstalt vorm. Roessler
SO S. African, 24 pp.
CODEN: SFXXAB
DT Patent
LA English
CC 27 (Heterocyclic Compounds (One Hetero Atom))
FAN.CNT 1

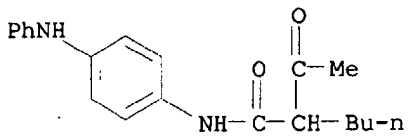
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI ZA 6706852		19680627		
PRAI DE		19661116		
DE		19670901		

GI For diagram(s), see printed CA Issue.
AB The title compds. (I) possess analgesic properties and were prepd. by the reaction of the corresponding amine and MeC(:R1)CHR2CO2H or its deriv., or by alkylation of I (R2 = H) with alkyl halide. Complex hydride redn. of I (R1 = O) yielded I (R1 = H,OH). To a soln. of 15 g. 2-anilino-5-aminopyridine in 100 ml. dioxane was added dropwise 6.8 g. AcCH:C:O to give 11 g. 2-anilino-5-acetoacetamidopyridine (I, R1 = O, R2 = H, X = N, Y = NH, R3 = R4 = R5 = H) (Ia), m. 153-4.degree.. To a soln. of 20 g. Ia in 120 ml. dioxane and 400 ml. MeOH at 5-10.degree. was added portionwise 2.8 g. NaBH4; refluxing at 50.degree. gave 16 g. 2-anilino-5-(3-hydroxybutyramido)pyridine, m. 161-2.degree.. To 14 g. Ia was added 1.2 g. Na in 50 ml. EtOH. After refluxing 2 hrs. 8.2 g. BuBr was added and refluxing continued 8 hrs. to yield 7 g. 2-anilino-5-(2-butylacetoacetamido)-pyridine, m. 146-7.degree. (EtOH-H2O). Also prepd. were the following I (m.p. given): 4-(3-hydroxybutyramido)diphenylamine, 127-8.degree.; 3-methoxy-4-(3-hydroxybutyramido)diphenylamine, 124-5.degree.; 4-(acetoacetamido)diphenylmethane, 88-9.degree.; 4-(3-hydroxybutyramido)diphenylmethane, 110-11.degree.; 4-(2-butylacetoacetamido)diphenylamine, 142-3.degree.; 2-(4-methylanilino)-5-(acetoacetamido)pyridine, 156-7.degree.; 2-(2-methoxyanilino)-5-(acetoacetamido)pyridine, 81-2.degree.; 2-(2-ethoxyanilino)-5-(acetoacetamido)pyridine, 117-18.degree.; 2-(4-ethoxyanilino)-5-(acetoacetamido)pyridine, 152-3.degree.; 2-(3-trifluoromethylanilino)-5-(acetoacetamido)pyridine, 127-8.degree.; 2-(2,5-dimethoxyanilino)-5-(acetoacetamido)pyridine, 103-4.degree.; 2-(2-ethoxyanilino)-5-(3-hydroxybutyramido)pyridine, 138-9.degree.; 2-(4-ethoxyanilino)-5-(3-hydroxybutyramido)pyridine, 151-2.degree.; 2-(3-trifluoromethyl)-5-(3-hydroxybutyramido)pyridine, 141-2.degree.; 2-(4-ethylanilino)-5-(3-hydroxybutyramido)pyridine, 118-19.degree.; (.+-.)-4-[(3-acetoxybutyramido)diphenylamine, 138-9.degree.; and (.+-.)-4-(3-hydroxybutyramido)diphenylamine, 126-7.degree..
ST amidopyridine analgesics; analgesics amidopyridine; pyridineamido

analgesics
IT 21671-82-9P 21671-83-0P 21683-99-8P 21684-00-4P 21684-01-5P
21684-02-6P 21684-03-7P 21684-04-8P 21684-05-9P
21684-06-0P 21684-07-1P 21684-08-2P 21684-09-3P
21684-10-6P 21684-11-7P 21684-12-8P 21684-13-9P 21795-03-9P
21795-04-0P 23221-71-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
IT **21684-02-6P 21684-06-0P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 21684-02-6 HCAPLUS
CN o-Acetoacetanisidide, 4'-anilino- (8CI) (CA INDEX NAME)



RN 21684-06-0 HCAPLUS
CN Hexananilide, 2-acetyl-4'-anilino- (8CI) (CA INDEX NAME)



=> fil uspatall
FILE 'USPATFULL' ENTERED AT 16:17:17 ON 17 AUG 2003
CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 16:17:17 ON 17 AUG 2003
CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

=> d 125 bib abs hitstr tot

L25 ANSWER 1 OF 2 USPATFULL on STN
AN 2003:181559 USPATFULL
TI Method for producing acetoacetylated aromatic amines
IN Glufke, Uta, Basel, SWITZERLAND
Hanselmann, Paul, Brig-Glis, SWITZERLAND
PI US 2003125392 A1 20030703
AI US 2002-182916 A1 20021021 (10)
WO 2001-EP1163 20010202
PRAI EP 2000-102418 20000204
DT Utility
FS APPLICATION
LREP Fishers Christen & Sabol, 1725 K Street N W Suite 1401, Washington, DC, 20006
CLMN Number of Claims: 7
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 265
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

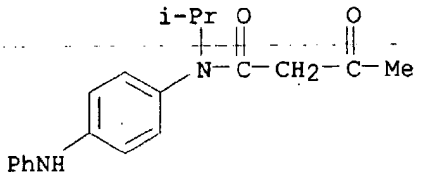
AB The invention relates to a method for producing compounds of general formula (I), wherein R.sup.1 and R.sup.2, each time they occur and independently of each other, mean hydroxy, C.sub.1-6-alkyl, C.sub.1-6-alkoxy, halogen, phenyl or phenoxy; R.sup.3 means hydrogen or C.sub.1-6-alkyl; m is a whole number from 0 to 4; and n is a whole number from 0 to 5. According to said method, diketene is reacted with a N-phenyl-p-phenylenediamine of general formula (II), wherein R.sup.1, R.sup.2, R.sup.3, m and n have the meanings given above, in the presence of 3-40% acetic acid and at temperatures of 20 to 100.degree. C., preferably 60 to 70.degree. C. The invention also relates to the compounds (I) with R.sup.3=C.sub.1,6-alkyl and the enamines that can be obtained from these by reaction with ammonia, and their hydration products.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT **347895-01-6P 353236-69-8P**
(prepn. of acetoacetylated arom. amines via condensation of diketene with N-phenyl-p-phenylenediamine derivs.)

RN 347895-01-6 USPATFULL

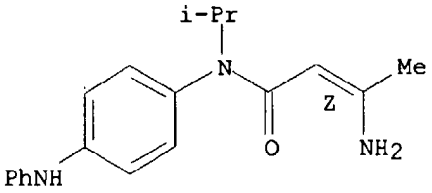
CN Butanamide, N-(1-methylethyl)-3-oxo-N-[4-(phenylamino)phenyl]- (9CI) (CA INDEX NAME)



RN 353236-69-8 USPATFULL

CN 2-Butenamide, 3-amino-N-(1-methylethyl)-N-[4-(phenylamino)phenyl]-, (2Z)- (9CI) (CA INDEX NAME)

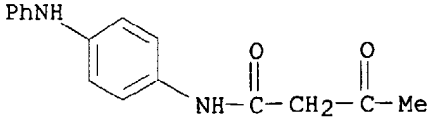
Double bond geometry as shown.



IT **38971-14-1P 347895-03-8P**
(prepn. of acetoacetylated arom. amines via condensation of diketene with N-phenyl-p-phenylenediamine derivs.)

RN 38971-14-1 USPATFULL

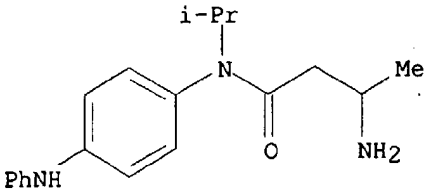
CN Butanamide, 3-oxo-N-[4-(phenylamino)phenyl]- (9CI) (CA INDEX NAME)



RN 347895-03-8 USPATFULL

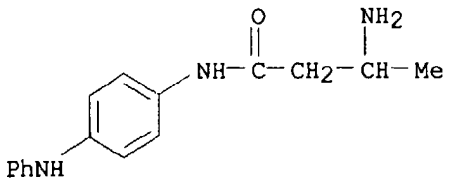
CN Butanamide, 3-amino-N-(1-methylethyl)-N-[4-(phenylamino)phenyl]- (9CI)

(CA INDEX NAME)

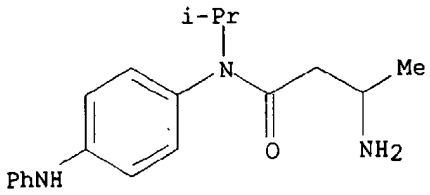


L25 ANSWER 2 OF 2 USPATFULL on STN
AN 2003:42735 USPATFULL
TI Antioxidant amines based on n-(4aniliophenyl) amides Antioxidant amines based on n-(4-anilinophenyl) Amides
IN Duyck, Karl J., Waterbury, CT, UNITED STATES
Nalesnik, Theodore E., Hopewell Junction, NY, UNITED STATES
PI US 2003030033 A1 20030213
AI US 2002-168405 A1 20020619 (10)
WO 2000-US32951 20001205
DT Utility
FS APPLICATION
LREP Daniel Reitenbach, Crompton Corporation, 199 Benson Road, Middlebury, CT, 06749
CLMN Number of Claims: 47
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1430
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A composition of matter is disclosed wherein the composition comprises an N-aromatic substituted acid amide compound selected from the group consisting of compounds of formula (I) wherein A and B are independently selected alkylene groups; R.sub.1 is selected form the group consisting of hydrogen, alkyl alkylether, or ester; R.sub.2 is hydrogen if R.sub.1 is hydrogen; R.sub.2 is an alkyl primary amine if R.sub.1 is alkyl, alkylether, or ester, R.sub.3 and R.sub.4 are independently selected from the group consisting of hydrogen and alkyl; R.sub.5 is a sterically hindered phenolic group of formula (II) or formula (III) wherein X is CH.sub.2, S, NH, or O; and m, n, and p are independently selected integers equal to 0 or 1. These compositions may be used as such or they may be bound to a polymer backbone via a linking moiety. In either case, they are useful as antioxidants, particularly in lubricating oil compositions.

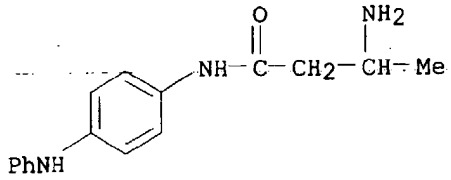
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **347895-00-5DP**, reaction products with maleated EPR
347895-03-8DP, reaction products with maleated EPR
(antioxidant amines based on N-(4-anilinophenyl)amides and polymer-bound antioxidant amines for lube oil additives)
RN 347895-00-5 USPATFULL
CN Butanamide, 3-amino-N-[4-(phenylamino)phenyl]- (9CI) (CA INDEX NAME)



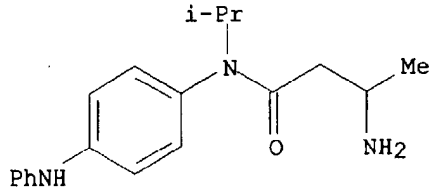
RN 347895-03-8 USPATFULL
CN Butanamide, 3-amino-N-(1-methylethyl)-N-[4-(phenylamino)phenyl]- (9CI) (CA INDEX NAME)



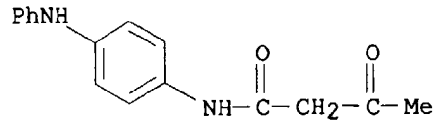
IT **347895-00-5P 347895-03-8P**
(antioxidant amines based on N-(4-anilinophenyl)amides and polymer-bound antioxidant amines for lube oil additives)
RN 347895-00-5 USPATFULL
CN Butanamide, 3-amino-N-[4-(phenylamino)phenyl]- (9CI) (CA INDEX NAME)



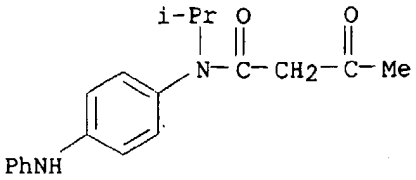
RN 347895-03-8 USPATFULL
CN Butanamide, 3-amino-N-(1-methylethyl)-N-[4-(phenylamino)phenyl]- (9CI) (CA INDEX NAME)



IT **38971-14-1 347895-01-6**
(antioxidant amines based on N-(4-anilinophenyl)amides and polymer-bound antioxidant amines for lube oil additives)
RN 38971-14-1 USPATFULL
CN Butanamide, 3-oxo-N-[4-(phenylamino)phenyl]- (9CI) (CA INDEX NAME)



RN 347895-01-6 USPATFULL
CN Butanamide, N-(1-methylethyl)-3-oxo-N-[4-(phenylamino)phenyl]- (9CI) (CA INDEX NAME)




```
=> d his

     (FILE 'HCAPLUS' ENTERED AT 15:58:33 ON 17 AUG 2003)
               DEL HIS

     FILE 'REGISTRY' ENTERED AT 15:58:50 ON 17 AUG 2003
L1                STR
L2             50 S L1 CSS
L3           5155 S L1 CSS FUL
                  SAV L3 KUMAR182/A
L4                STR L1
L5             14 S L4 SAM SUB=L3
L6                SCR 2043 OR 2039 OR 2050 OR 2049 OR 2048 OR 2053 OR 2054
L7             10 S L4 NOT L6 SAM SUB=L3
L8            239 S L4 NOT L6 FUL SUB=L3
                  SAV L8 KUMAR182A/A
L9              1 S ACETIC ACID/CN
L10               STR L1
L11             0 S L10 SAM SUB=L3
L12             4 S L10 FUL SUB=L3
                  SAV L12 KUMAR182B/A
L13               STR L10
L14             0 S L13 SAM SUB=L3
L15             3 S L13 FUL SUB=L3
                  SAV L15 KUMAR182C/A
L16             1 S AMMONIA/CN

     FILE 'HCAOLD' ENTERED AT 16:09:41 ON 17 AUG 2003
L17             0 S L12 OR L15

     FILE 'HCAPLUS' ENTERED AT 16:09:43 ON 17 AUG 2003
L18             5 S L12 OR L15
L19             1 S L18 AND L8
L20             2 S L18 AND (L9 OR L16 OR ACETIC ACID OR ACETATE OR AMMONIA OR NH
L21             3 S L12/P OR L15/P
L22             3 S L19,L21
L23             2 S L18,L20 NOT L22
L24             5 S L18-L23

     FILE 'USPATFULL, USPAT2' ENTERED AT 16:11:26 ON 17 AUG 2003
L25             2 S L12 OR L15

     FILE 'REGISTRY' ENTERED AT 16:11:44 ON 17 AUG 2003

     FILE 'HCAPLUS' ENTERED AT 16:12:36 ON 17 AUG 2003

     FILE 'REGISTRY' ENTERED AT 16:13:40 ON 17 AUG 2003
L26             1 S 674-82-8
L27             1 S 3085-82-3

     FILE 'HCAPLUS' ENTERED AT 16:14:38 ON 17 AUG 2003
```

L28 1 S L26,L27 AND L24
L29 1 S (DIKETENE OR ETHENONE OR 4 METHYLENE 2 OXETANONE OR NSC 93783
L30 5 S L24,L28,L29

FILE 'REGISTRY' ENTERED AT 16:16:20 ON 17 AUG 2003

FILE 'HCAPLUS' ENTERED AT 16:17:02 ON 17 AUG 2003

FILE 'USPATFULL, USPAT2' ENTERED AT 16:17:17 ON 17 AUG 2003